

**ABSTRACT**

Methods of designing optimal discrete-time PID (proportional-integral-derivative) controllers and linear controllers are disclosed. The optimal values of the tuning parameters in a PID controller or a linear controller are determined by minimizing the maximum of absolute values of all poles of the discrete-time closed-loop transfer function from the set-point to the process variable subject to, if any, user-specified constraints on one or more of the tuning parameters.

**SEQUENCE LISTING**

Not Applicable

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